Microrecording in the brain

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ABSTRACT

Deep brain stimulation (DBS) is an exiting new technique where electrodes are placed in the brain in order to correct dysfunction in neuronal circuits in certain diseases (Parkinsons disease, Dystonia and other movement disorders). Microelectrodes are used to characterize precisely the target area prior to insertion of a DBS electrode, through e.g. sonification of the micro-recording data. The physiologic characteristics of the target, including the firing rate and pattern of its neurons allow its positive identification.

Firing rate and pattern of neurons in different brain areas will be presented as well as examples of clinical results using deep brain stimulation.